### FINAL ENVIRONMENTAL ASSESSMENT

# KIHEI WASTEWATER PUMP STATION NOS. 6, 7, AND 8 UPGRADES

Prepared for:



County of Maui
Department of Public Works

December 1992

Michael T. Munekiyo Consulting, Inc.

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#### <u>Preface</u>

The County of Maui, Department of Public Works, proposes to upgrade three (3) wastewater pump stations in Kihei, Maui, Hawaii (TMK 3-9-5:portion of 52, 3-9-5:portion of 29, and 3-9-4:142). Pursuant to Chapter 343, Hawaii Revised Statutes, Chapter 200 of Title 11, Administrative Rules, Environmental Impact Statement Rules, this Final Environmental Assessment documents the project's technical characteristics and environmental impacts, and advances findings and conclusions relative to the significance of the project.

#### <u>Summary</u>

#### Applicant and Landowner

The Applicant for the proposed project is the County of Maui, Department of Public Works. The landowner for the three (3) wastewater pump stations is the County of Maui.

#### Property Location and Description

The proposed project consists of improvements and upgrades to Kihei Wastewater Pump Station (WWPS) Nos. 6, 7, and 8 located in Kihei, Maui, Hawaii.

WWPS No. 6 (TMK 3-9-05:portion of 52) is located on the makai side of South Kihei Road in the northeast corner of Kalama Park. Existing improvements to the site include an approximately 30-foot by 30-foot concrete masonry block (CMU) building, a surge tank, pump house and below-grade valve vault. Fronting the CMU structure is an asphaltic concrete paved area that provides a driveway and a small parking area. A chainlink fence approximately 6-feet in height secures the site. Vegetation at the site includes kiawe, palm, and plumeria trees and a hibiscus hedge.

WWPS No. 7 is located on a narrow strip of land between the shoreline of Kamaole Beach Park I and South Kihei Road (TMK 3-9-05:portion of 29). The project site is characterized by an approximately 20-foot by 20-foot CMU structure bordered by an asphaltic concrete driveway and parking area on the South Kihei Road frontage. The project site is landscaped with an oleander hedge on the north side and kiawe and plumeria trees on the south.

WWPS No. 8 (TMK 3-9-04:142) is located on the mauka side of South Kihei Road, approximately 500 feet north of the intersection of Kilohana Drive and South Kihei Road. The site contains an approximately 20-foot by 20-foot CMU building with an asphaltic concrete driveway and parking area that provides access to South Kihei Road. The west, south, and east sides of the project site are landscaped with an oleander hedge.

#### **Proposed Action**

The Applicant proposes to modify and replace existing equipment within the pump station sites. WWPS Nos. 6, 7, and 8 would require the following improvements:

- 1. Replacement of existing pumps and piping;
- 2. Replacement of existing electrical apparatus;
- 3. Replacement of existing standby generators and manual and automatic transfer switches;
- 4. Replacement of wet well level measurement instrumentation;
- 5. Addition of new magnetic flow meters;
- 6. Modification of existing pump station ventilation systems;
- 7. Replacement of influent sluice gates; and
- 8. Replacement of underground ductline for electrical service.

WWPS No. 6 improvements also include a new CMU structure approximately 30-feet by 30-feet in area to house a new motor control center and generator. Additional asphaltic concrete driveway and parking area of approximately 1,100 square feet is proposed to provide access to the new structure. In addition, an electric transformer and switch, a 2,000-gallon above-ground diesel fuel storage tank, and a below-grade wet well access structure are proposed. Landscaping improvements are also proposed around the pump station site.

WWPS No. 7 improvements include a new below-grade wet well extending approximately 8-feet by 8-feet mauka of the existing pump station structure. A 250-gallon above-ground diesel fuel storage tank is also proposed on this site. Fencing and landscaping around the pump station site is proposed to provide security and aesthetic enhancement.

WWPS No. 8 improvements include a new CMU structure approximately 25-feet by 25-feet in area to contain a generator and electrical room. A below-grade wet well approximately 10-feet by 12-feet in area is also proposed. Asphaltic concrete paving of

approximately 1,000 square feet, an electric transformer and switch, a 2,000-gallon above-ground diesel fuel storage tank, and fencing and landscaping improvements are also proposed.
Findings and Conclusion  The proposed improvements to Kihei WWPS Nos. 6, 7 and 8 would increase reliability by replacing aging and outdated equipment. Additional pumping capacity is also being provided, which is necessary to serve ongoing development.
The proposed project will not involve substantial site work. However, there are temporary nuisances normally associated with construction activities. Dewatering discharges from wet well construction at WWPS Nos. 7 and 8 will be routed to the closest County or other acceptable drainage system in compliance with all applicable Federal, State and County regulations. Noise impacts related to dewatering pump operations are expected to be mitigated. The extent of construction impacts should not be adverse.
From a long-term perspective, the project is not anticipated to cause adverse environmental impacts. There are no known archaeological features or rare/threatened species of flora and fauna at the three pump station sites. The project also will not generate adverse air quality or noise conditions. Each of the pump station sites does not have a significant impact on coastal scenic and open space resources.
No additional County personnel are required as a result of the proposed improvements. In this regard, the project is not considered significant in terms of its impacts to public services and other infrastructure systems.
In light of the foregoing findings, it is concluded that the proposed action will not result in any significant impacts.
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## Chapter I

Introduction and Background

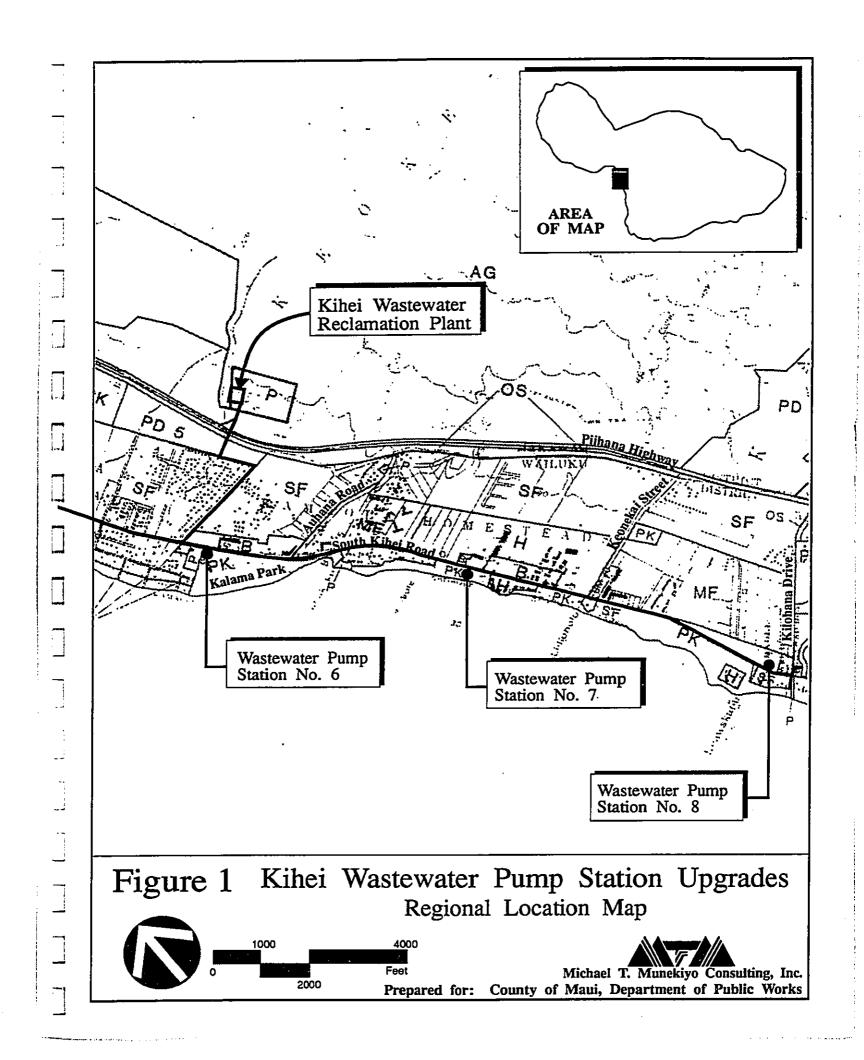
#### INTRODUCTION AND BACKGROUND

The County of Maui, Department of Public Works (DPW) proposes to upgrade three (3) wastewater pump stations in Kihei, Maui, Hawaii. These are identified as Wastewater Pump Station (WWPS) Nos. 6, 7, and 8. See Figure 1. To provide the context within which the proposed project is to be undertaken, this chapter describes existing improvements at the wastewater pump station sites.

#### A. EXISTING WASTEWATER PUMP STATION IMPROVEMENTS

WWPS No. 6 is located in the northeast corner of Kalama Park (TMK 3-9-05:portion of 52). The site is characterized by an approximately 30-foot by 30-foot concrete masonry unit (CMU) building, a surge tank, pump house and below-grade valve vault. The area fronting the building is paved with asphaltic concrete, providing a driveway and small parking area. A chainlink fence, approximately 6 feet in height, surrounds the pump station site. To the west and south of the project site is Kalama Park. The Kihei Fire Station borders the north face of the property, while across South Kihei Road, to the east, is the Kukui Mall shopping complex. Landscaping at the site includes a hibiscus hedge on the north side of the property, and kiawe, plumeria, and palm trees on the south side of the property.

WWPS No. 7 is located on a narrow strip of land between the shoreline of Kamaole Beach Park I and South Kihei Road (TMK 3-9-05:portion of 29). The site contains an approximately 20-foot by 20-foot CMU pump station structure. On the east side of the CMU structure is an asphaltic concrete driveway and parking area that provides access to South Kihei Road. The south side of the CMU building is landscaped with plumeria and kiawe trees and the north side is landscaped with an oleander hedge. Across South Kihei Road, to the east, is the Kamaole Beach Club, a condominium complex. To the south, west and north of the pump station site is the Kamaole Beach Park I.



WWPS No. 8 is located on the mauka side of South Kihei Road (TMK 3-9-08:142), approximately 500 feet north of the intersection of Kilohana Drive and South Kihei Road. The site contains an approximately 20-foot by 20-foot CMU pump station structure. On the north side of the CMU building, an asphaltic concrete paved area provides a driveway and a parking area. The site also includes a below-grade vault located northwest of the CMU structure. The south, east, and west sides of the site are landscaped with an oleander hedge. Lands to the north, south and east of the WWPS No. 8 site are vacant. West of the project area, across South Kihei Road, is the Wailea Oceanfront Hotel, the Hale Hui Kai, and a few single-family oceanfront residences.

WWPS Nos. 6, 7 and 8 all have a similar configuration. All incorporate a cylindrical substructure, topped by a one-level block superstructure. The substructure is split by a single wall into wet well and dry well components. All pumps are vertically mounted centrifugal pumps and are located in the dry wells.

Each existing pump station structure houses electrical apparatus, including motor control centers and a standby diesel generator. Diesel fuel is stored in a 675-gallon underground tank at WWPS No. 6, and in 150-gallon underground tanks at WWPS Nos. 7 and 8.

Both the dry well and wet well are accessed through the superstructure floor. The dry well is accessed via a circular stair and the wet well is accessed through a floor hatch.

Ventilation is provided by a single blower which provides both the upper and lower level through a single duct. Ventilation out of the structure is via louvers.

## Chapter II

Description of the Proposed Project

#### II. DESCRIPTION OF THE PROPOSED PROJECT

#### A. PROJECT NEED

The Kihei wastewater pump stations, which were originally designed in 1973, collect wastewater from North and South Kihei, Wailea and Makena and convey it to the Kihei Wastewater Reclamation Plant. WWPS Nos. 2, 3, 4, and 5 convey wastewater from North Kihei to WWPS No. 6. WWPS Nos. 16, 10, 9, 8 and 7 convey wastewater from Makena, Wailea and South Kihei to WWPS No. 6. WWPS No. 6 then pumps the combined north and south flows to the Kihei Wastewater Reclamation Plant. Figure 2 illustrates the geographic relationship of the pump stations and the reclamation plant.

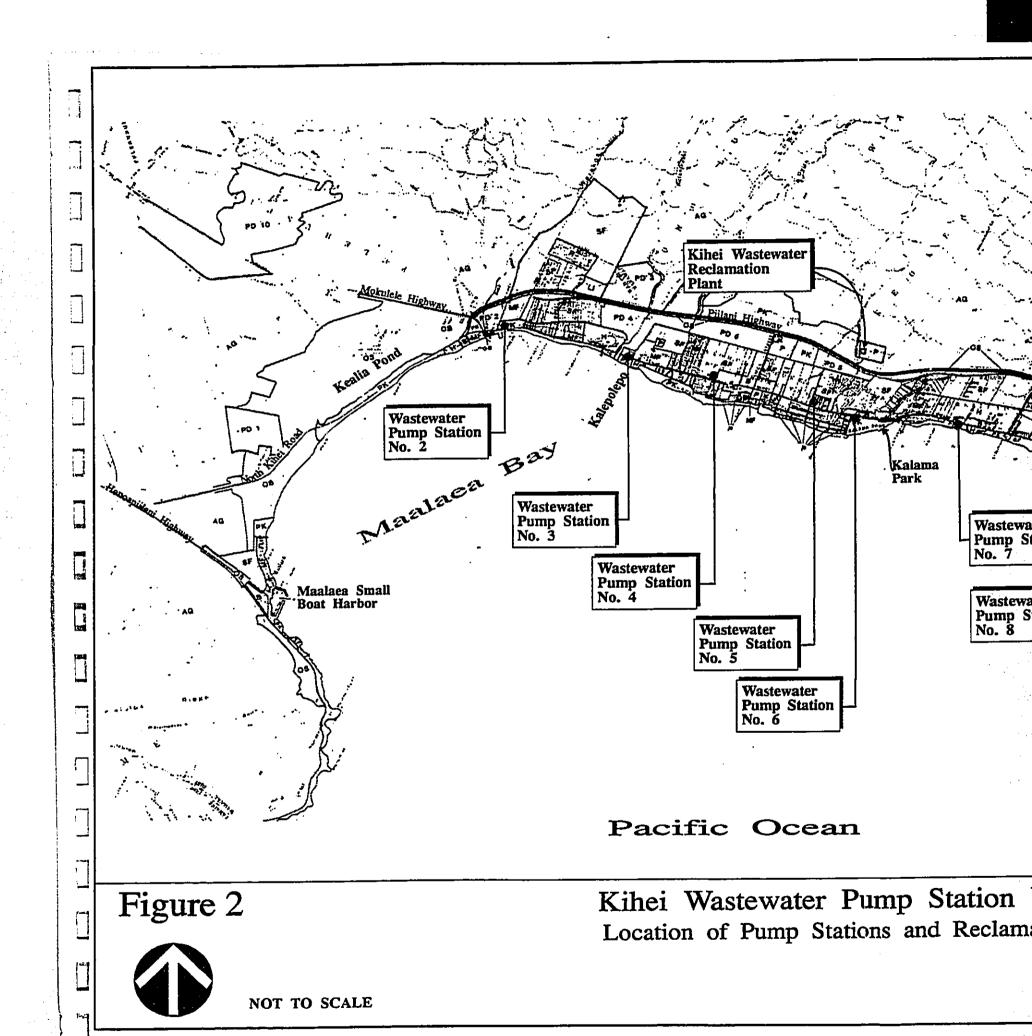
Proposed improvements to WWPS Nos. 6, 7, and 8 are intended to improve reliability and increase the capacity of the stations which is necessary to serve ongoing development.

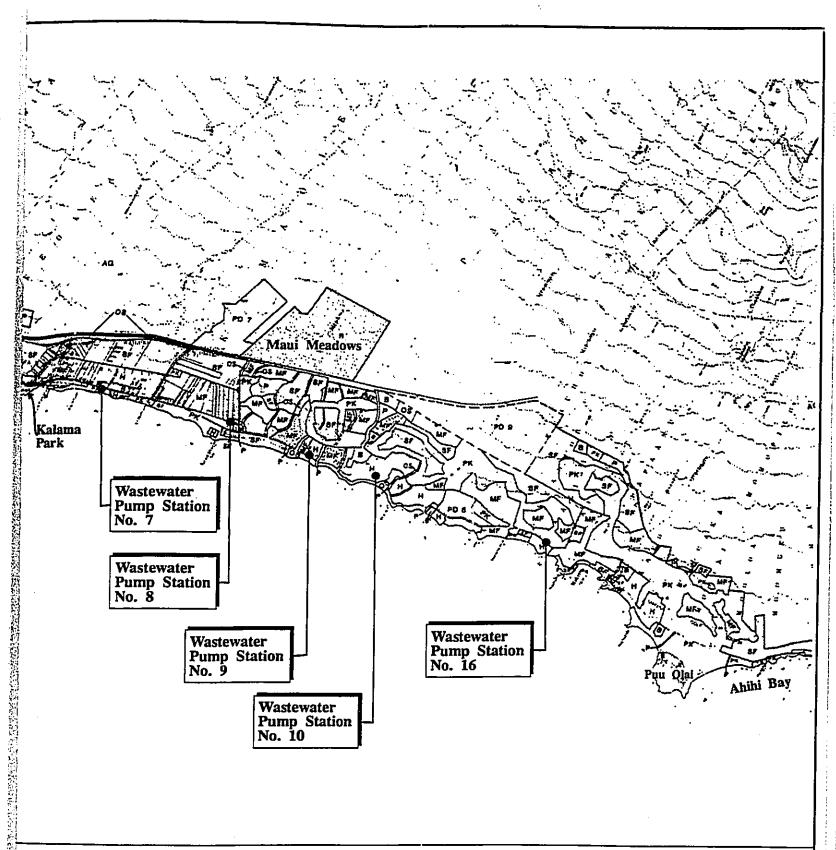
#### B. PROPOSED IMPROVEMENTS

Replacement or modification of equipment within the existing sites are being proposed.

WWPS Nos. 6, 7, and 8 require the following technical improvements:

- Replacement of existing pumps and piping;
- Replacement of existing electrical apparatus;
- Replacement of existing standby generators and manual and automatic transfer switches;
- Replacement of wet well level measurement instrumentation;
- Addition of new magnetic flow meters;
- Modification of existing pump station ventilation systems;
- Replacement of influent sluice gates; and





mp Station Upgrades is and Reclamation Plant

Replacement of underground ductline for electrical service.

WWPS No. 6 improvements also include a new CMU structure approximately 30-feet by 30-feet in area to house a new motor control center and generator. Additional asphaltic concrete driveway and parking area of approximately 1,100 square feet is proposed to provide access to the new structure. In addition, an electric transformer and switch, a 2,000-gallon above-ground diesel storage tank, and a below-grade wet well access structure are proposed. Landscaping improvements are also proposed around the pump station site. See Figure 3.

WWPS No. 7 improvements include a new below-grade wet well extending approximately 8-feet by 8-feet mauka of the existing pump station structure. A 250-gallon above-ground diesel fuel storage tank is also proposed on this site. Fencing and landscaping around the pump station site is proposed to provide security and aesthetic enhancement. See Figure 4.

WWPS No. 8 improvements include a new CMU structure approximately 25-feet by 25-feet in area to contain a generator room and electrical room. A new below-grade wet well, approximately 10-feet by 12-feet in area, is also proposed. Asphaltic concrete paving of approximately 1,000 square feet, an electric transformer and switch, a 2,000-gallon above-ground diesel storage tank, and fencing and landscaping improvements are also proposed. See Figure 5.

The total cost of all improvements is estimated to be \$4 million. Assuming all applicable permits are obtained, construction is projected to start in July 1993 and be completed by mid-1994.

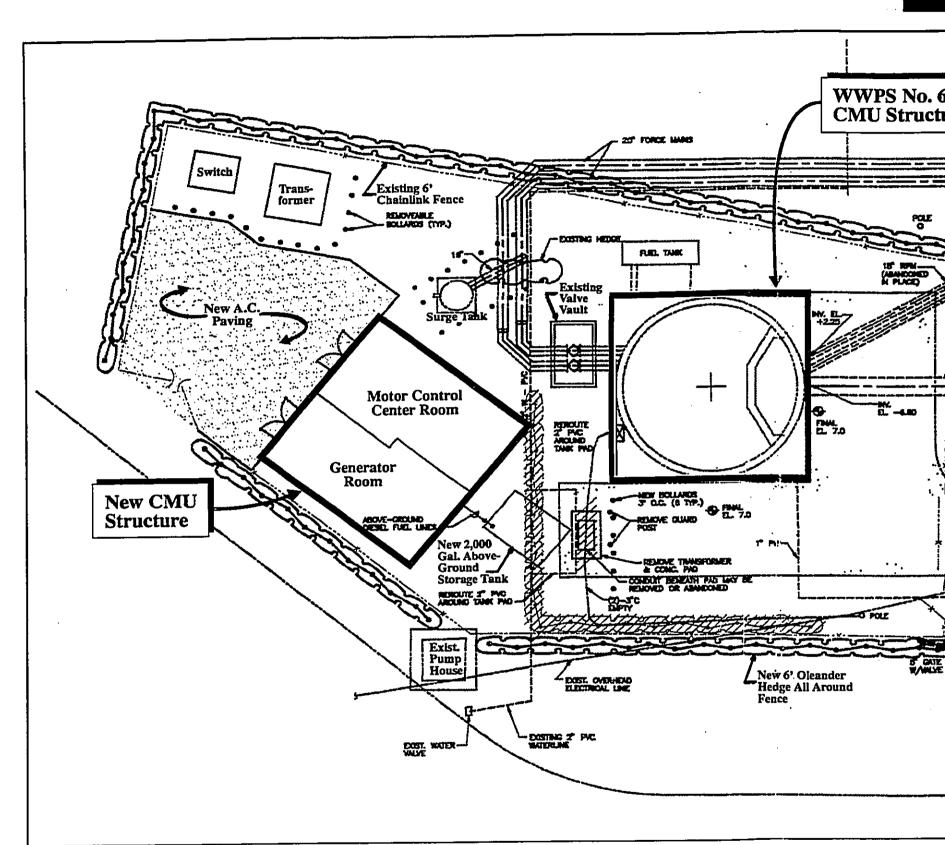
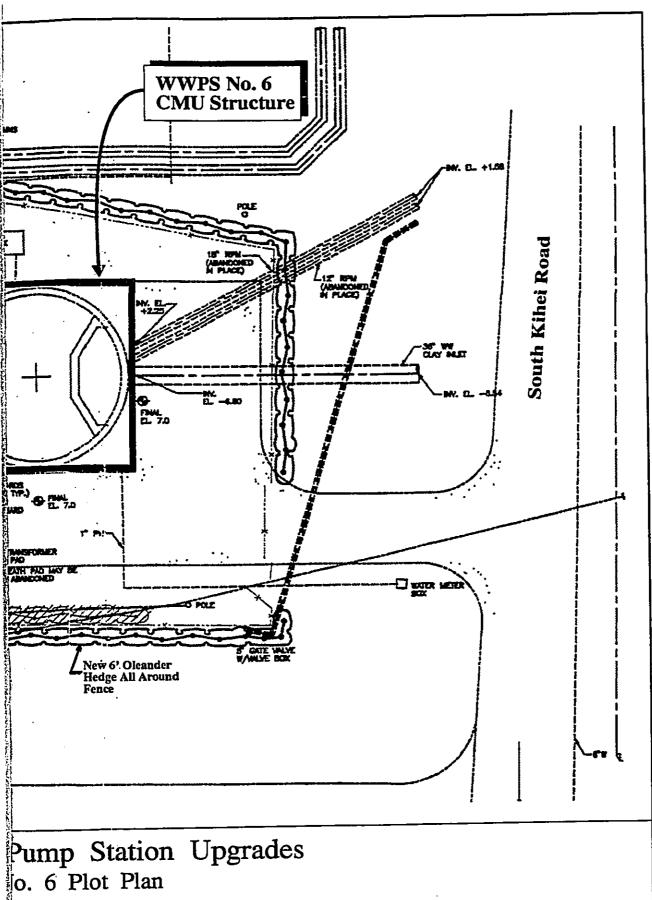


Figure 3

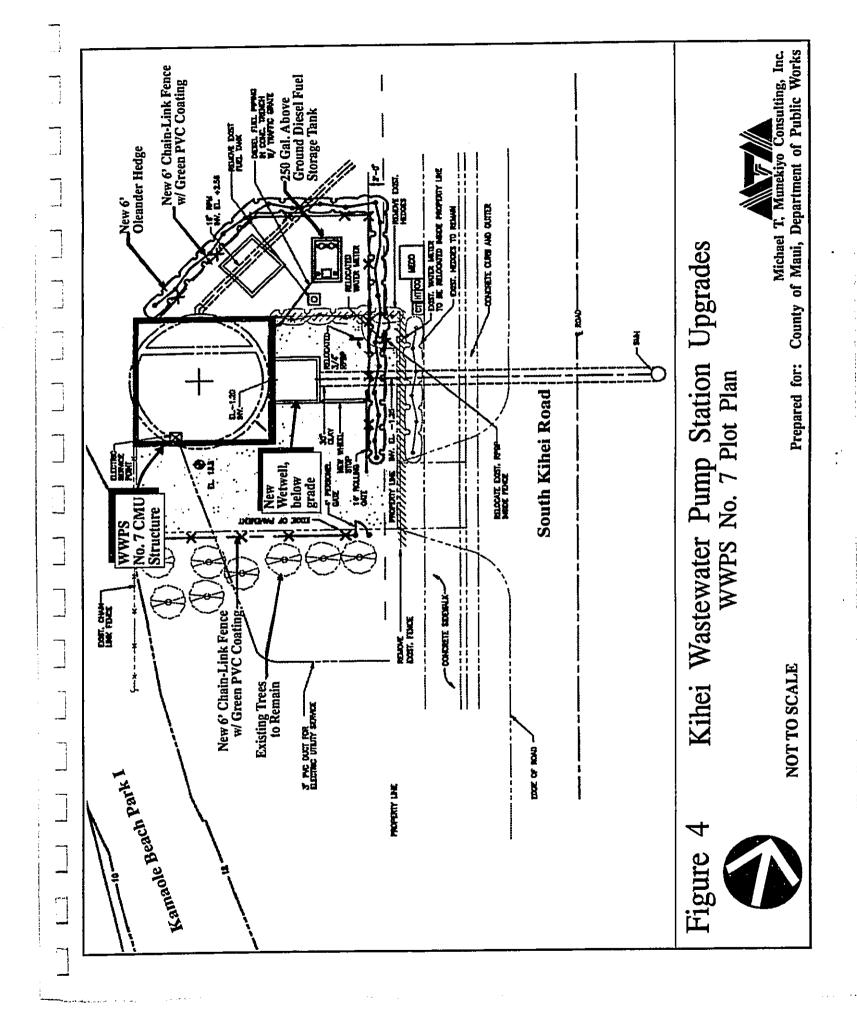
Kihei Wastewater Pump Station Upgrad WWPS No. 6 Plot Plan

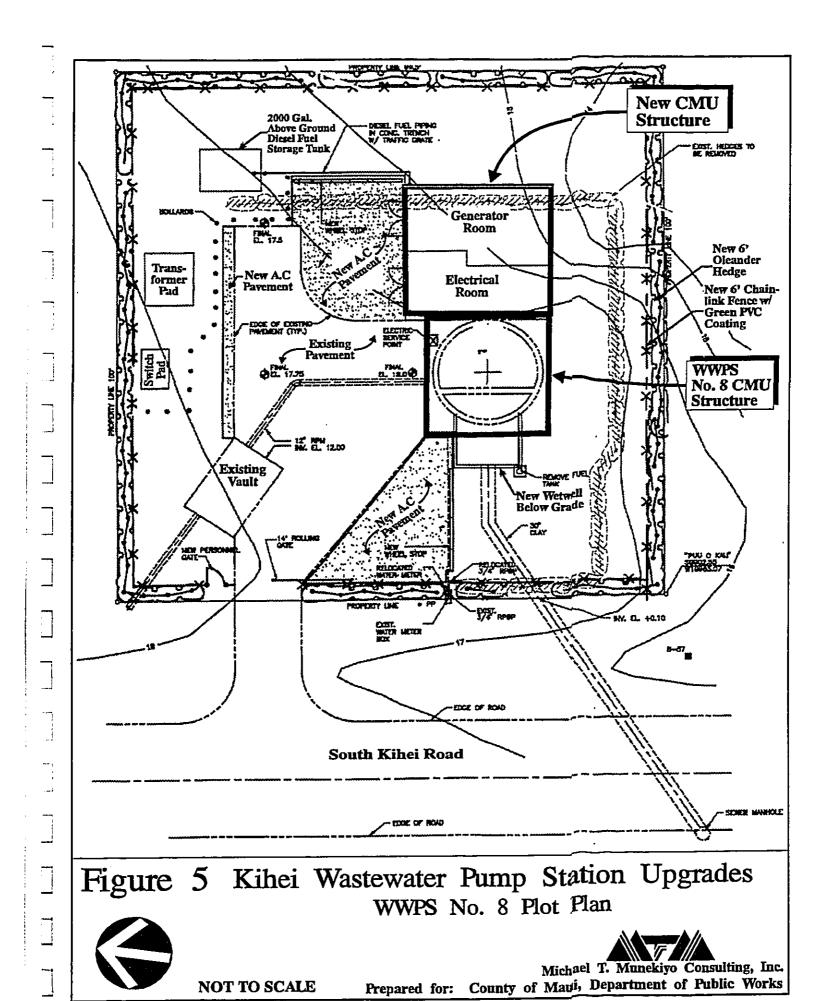


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Prepared for: County of Maui, Department of Public Works





All three WWPS sites are within the County of Maui Special Management Area. A major SMA permit application will be filed with the County of Maui Planning Department and a public hearing before the Maui Planning Commission is required.

Both WWPS Nos. 6 and 7 are located in portions of shoreline lots. In the case of WWPS No. 6, a certified shoreline survey is not being required by the County of Maui, Planning Department. The pump station site is approximately 850 feet from the ocean, outside of the shoreline setback, and the shoreline in this vicinity has been artificially fixed by an existing rock revetment. For WWPS No. 7, a certified shoreline survey is in the process of being completed. In order to construct the proposed improvements, it is anticipated that a shoreline setback variance application would be submitted to the County of Maui, Planning Department at the same time as the SMA application. The Maui Planning Commission would be the decision-making body in the case of a Shoreline Setback Variance application.

### Chapter III

Description of the Existing Environment

#### III. DESCRIPTION OF THE EXISTING ENVIRONMENT

#### A. PHYSICAL ENVIRONMENT

#### 1. Climate

The Kihei Coast, which encompasses the three project sites, is generally sunny, warm and dry the entire year. In Kihei Town, the average annual high temperature is 86 degrees Fahrenheit with the average low temperature being 63 degrees Fahrenheit (Environment Impact Study Corporation, 1982). June through August are historically the warmer months of the year, while the cooler months are January to March.

Average rainfall distribution in the Kihei-Makena region varies from under 10 inches per year to 20 inches per year in the higher elevations. Rainfall in the Kihei-Makena region is highly seasonal, with most of the precipitation occurring in the winter months.

Northeast tradewinds prevail approximately 80 to 85 percent of the time. Winds average 10 to 15 miles per hour during afternoons, with slightly lighter winds during mornings and nights.

The Ma'alaea-Kihei-Makena region is subject to unique wind conditions due to specific terrain. The Ma'alaea area, which lies at the base of the central isthmus flanked by two mountain masses, is subject to a wind tunnel effect. As the wind squeezes between the mountain masses, its force becomes compressed, at times increasing velocity to more than 50 percent above the normal velocity in the Wailuku area. The wind fans out over Ma'alaea Bay, retaining the added velocity, with the inshore segment blowing parallel to the Kihei Coast. Along the shore, it meets the eddy current of the trades deflected along the southeast slopes of

Haleakala. This results in unpredictable local winds from Kalama Park to Cape Kina'u.

#### 2. Topography and Soil Characteristics

The topography of the three project sites is flat or with a slight slope, characteristic of the nearshore coastline in Kihei.

Underlying all three WWPS sites is the Pulehu-Ewa-Jaucas soil association which is characterized by deep, nearly level to moderately sloping, well-drained and excessively drained soils. The underlying material is moderately fine-textured to coarse-textured subsoil. This soil occurs on alluvial fans and in basins. See Figure 6.

The soil type at WWPS Nos. 6 and 7 is Jaucas sand (JaC). See Figure 7. The slope range of the soil is 0 to 15 percent, but in most cases the slope does not exceed 7 percent. In a representative profile, the soil is single grain, pale brown to very pale brown, sandy, and more than 60 inches deep. In many places, the surface layer is dark brown as a result of accumulation of organic matter and alluvium. The soil is neutral to moderately alkaline throughout the profile.

The soil type at WWPS No. 8 is Dune land (DL). See Figure 8. Dune land soils consist of sand-sized particles drifted and piled by the wind. The soils are actively shifting, and as a result no soil horizons have developed. The sand is predominantly from coral and seashells.

#### **LEGEND**

Pulchu-Ewa-Jaucas association

Waiakoa-Keahua-Molokai association

Honolua-Olelo association

Rock land-Rough mountainous land association

9 Puu Pa-Kula-Pane association

6 Hydrandepts-Tropaquods association

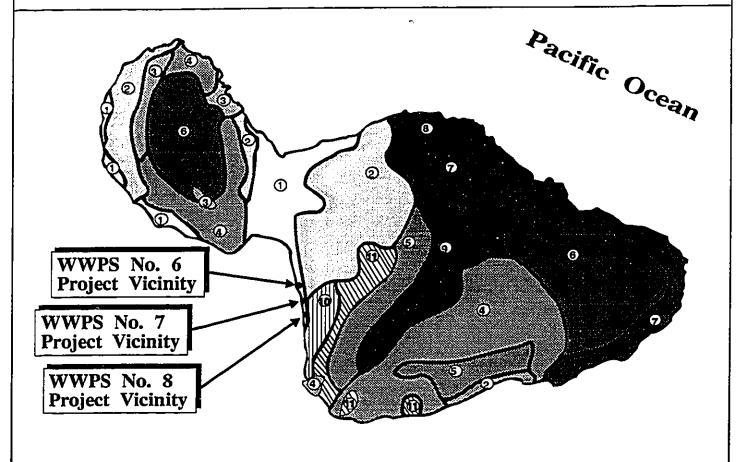
Hana-Makaalae-Kailua association

8 Pauwela-Haiku association

9 Laumaia-Kaipoipoi-Olinda association

Keawakapu-Makena association

Kamaole-Oanapuka association

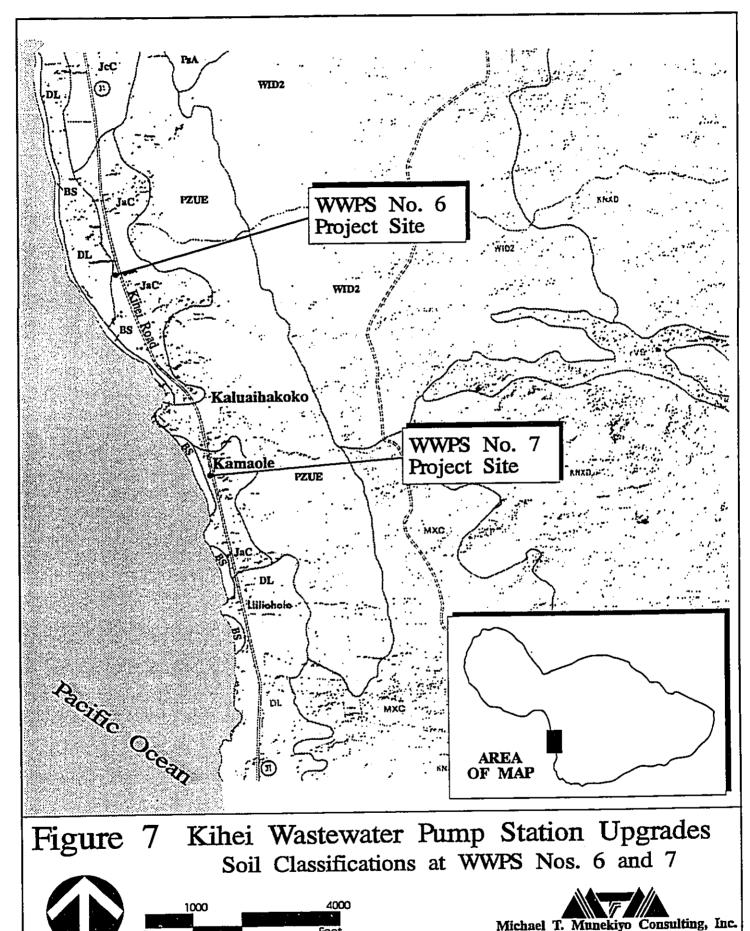


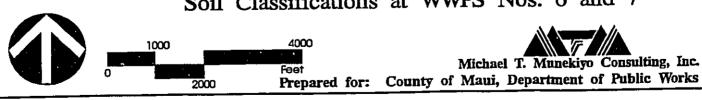
Map Source: USDA Soil Conservation Service

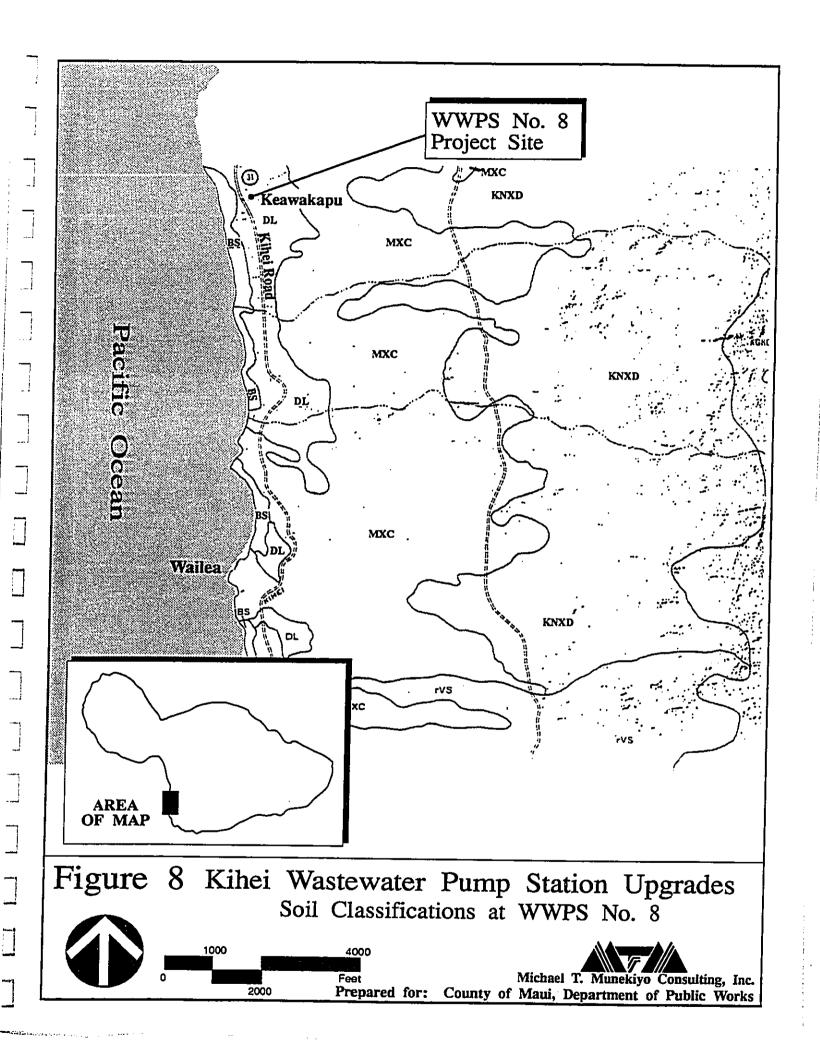
Figure 6 Kihei Wastewater Pump Station Upgrades Soil Association Map



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Prepared for: County of Maui, Department of Public Works







#### 3. <u>Flood and Tsunami Hazard</u>

According to the Flood Insurance Rate Maps issued by the Federal Emergency Management Agency, WWPS No. 6 is in Zone AH (Areas Inundated by the 100-Year Flood with a Base Flood Elevation of 7 Feet Above Mean Sea Level). WWPS Nos. 7 and 8 are both located in Zone C (Areas of Minimal Flooding). See Figure 9 and Figure 10.

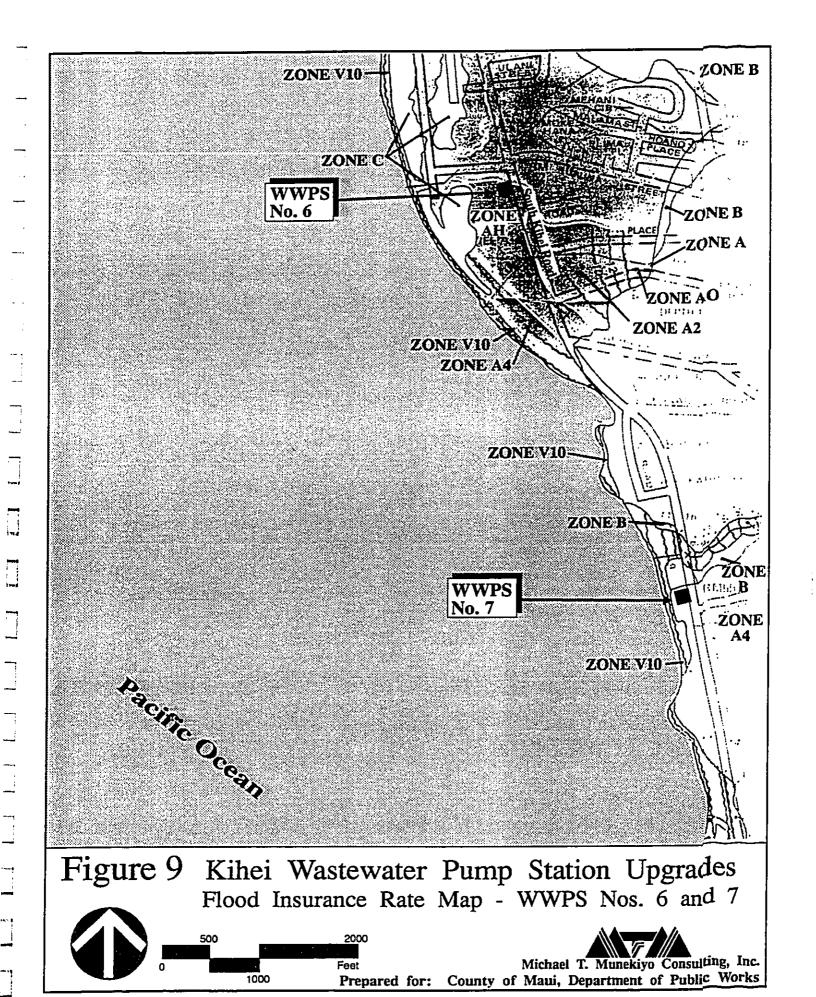
#### 4. Flora and Fauna

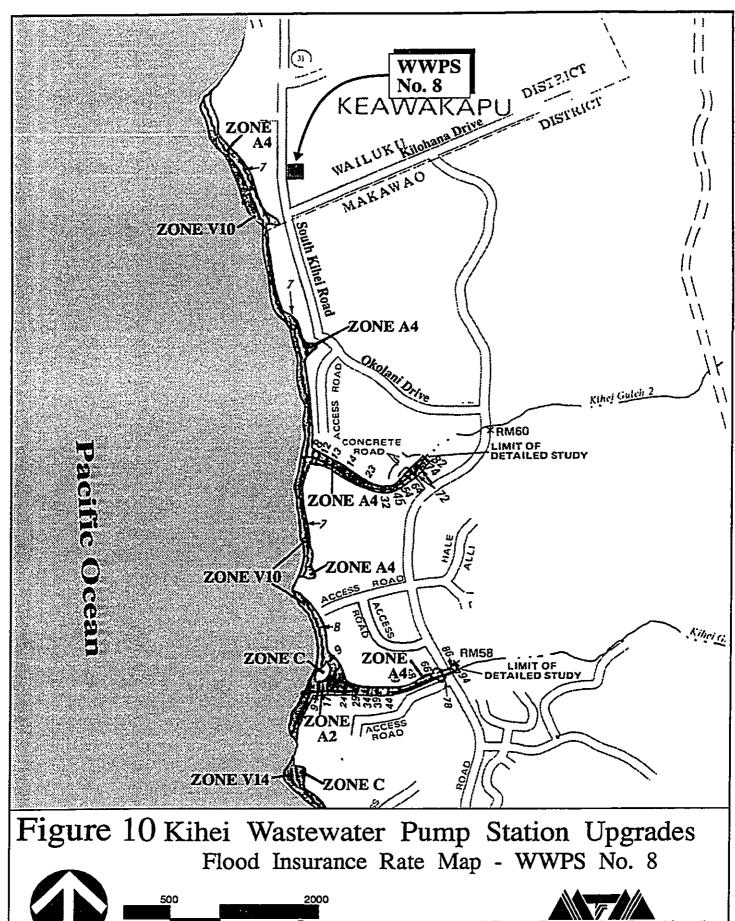
The flora and fauna of the three project sites are characteristic of the urban nature of Kihei. Landscaping is composed of introduced plant species which include cleander and hibiscus. Scattered kiawe is typical at all three sites. There are no rare or endangered plant species found at any of the sites.

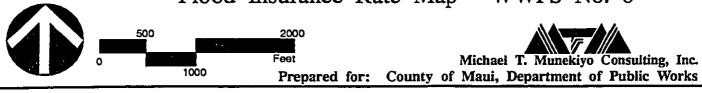
Fauna and avifauna is also characteristic of urban areas. Fauna typically found in the vicinity include mongoose, rats, dogs and cats. Avifauna typically include mynas, several types of doves, and house sparrows. There are no rare or endangered species of fauna or avifauna found at any of the sites.

#### 5. Air Quality

There are no point sources of airborne emissions in the immediate vicinity of the project sites. The air quality of the Kihei area is considered good with existing airborne pollutants attributed primarily to automobile exhaust from the region's roadways. Another source of airborne emissions may include smoke from sugarcane burning which occurs in the Central Maui isthmus. This source is intermittent, however, and prevailing tradewinds quickly disperse particulates which are generated.







#### 6. Noise Characteristics

There are no fixed noise generators in the vicinity of the project sites. Background noise in this locale can be attributed to traffic travelling along South Kihei Road.

#### 7. Archaeological Resources

The sites for WWPS Nos. 6, 7 and 8 have been cleared and graded to accommodate subsurface and above-ground pump station improvements. Accordingly, the project is not anticipated to have adverse impacts to archaeological resources.

#### B. COMMUNITY SETTING

#### 1. Land Use and Community Character

The Kihei-Makena Community Plan region includes a diverse range of physical and socio-economic environments. With its dry and mild climate and proximity to recreation-oriented shoreline resources, the visitor-based economy has grown steadily over the past few years. The town of Kihei serves as the commercial and residential center of the region with the master-planned communities of Wailea and Makena serving as the focal point for visitor activities.

Two of the project sites, WWPS Nos. 6 and 7, are located in Kihei Town, while WWPS No. 8 is located on the southern periphery of the town close to Wailea.

#### 2. Population

The population of the County of Maui has exhibited relatively strong growth over the past decade, with the 1990 population estimated to be 100,374, a 41.7 percent increase over the 1980 population of

70,847. Growth in the County is expected to continue, with resident population projections to the years 2000 and 2010 estimated to be 123,900 and 145,200, respectively (DBED, 1990).

Just as the County's population has grown, the resident population of the region surrounding the project sites has increased dramatically in the last two decades. Population gains were especially pronounced in the 1970's as the rapidly developing visitor industry attracted many new residents. The current resident population of the Kihei-Makena region is estimated at 15,365. A projection of the resident population for the years 2000 and 2010 are 19,885 and 22,830, respectively (Community Resources, Inc., 1992).

#### 3. Economy

The economy of Maui is heavily dependent upon the visitor industry. In 1991, for example, total visitor expenditures equalled \$2.4 billion (First Hawaiian Bank Research Department, 1992). The dependency on the visitor industry is especially evident in Kihei-Makena, which is one of the State's major resort destination areas. The openings of the Four Seasons Hotel, the Grand Hyatt and Kea Lani Hotel have boosted the region's significance as a resort destination.

Support for the visitor industry is found in Kihei, where numerous retail commercial centers are found. New commercial centers in Kihei, such as Azeka's and the Longs Drugs complexes, will lend further support to the regional economy.

#### 4. Police and Fire Protection

The County of Maui's Police Department is headquartered at its Wailuku Station. The Department consists of several patrol,

investigative and administrative divisions. The Department's Kihei Patrol covers the Kihei-Makena region.

Fire prevention, suppression and protection services are offered by the County's Department of Fire Control. The Kihei Station, which services the Kihei-Makena region, is located on South Kihei Road. WWPS No. 6 shares its northern boundary with the Kihei Fire Station. WWPS No. 7 is approximately one mile south, and WWPS No. 8 is approximately 2.25 miles south from the Kihei Fire Station.

#### 5. Medical Facilities

Maui Memorial Hospital, the only major medical facility on the Island, services the Kihei-Makena region. Acute, general and emergency care services are provided by the 145-bed facility which is located in Wailuku. Medical/dental offices are located in the Kihei area to serve the region's residents.

#### 6. Recreational Facilities

Diverse recreational opportunities are available in the Kihei-Makena region. Recreational facilities in close proximity to the project site include the Kalepolepo Park, Silversword Golf Course, Kalama Park, Kamaole Beach Park, and numerous other beach parks along the Kihei coastline. Shoreline recreation includes swimming, fishing, picnicking and snorkeling.

The Wailea-Makena resort areas to the south of the project site offer additional opportunities for golf, tennis and ocean-related activities.

#### 7. Schools

The State Department of Education operates two schools in the Kihei

area. Kihei Elementary School covers Grades K to 6, while Lokelani Intermediate School includes Grades 7 and 8. Public school students in Grades 9 through 12 attend H.P. Baldwin High School in Wailuku.

#### C. INFRASTRUCTURE

#### 1. Roadway System

South Kihei Road and Piilani Highway are the two major routes serving the Kihei region.

Access to WWPS Nos. 6, 7 and 8 is provided from South Kihei Road.

#### 2. Water

The Kihei-Makena region is served by the Central Maui Water System. Source wells located in upper Waiehu provide water for the region. A 12-inch waterline extending along South Kihei Road provides service to the project sites.

#### 3. Drainage

In the case of WWPS No. 6, a major portion of the surface runoff sheet flows into adjoining Kalama Park. Approximately 900 feet south of the WWPS No. 6 site are three catch basins which connect with a drainage channel which traverses Kalama Park to the ocean. This drainage system serves the area around the Kihei Town Center and Kalama Park.

For the WWPS No. 7 site, a major portion of the surface runoff sheet flows into adjoining Kamaole Beach Park I and the ocean.

Surface runoff from WWPS No. 8 sheet flows largely to South Kihei Road. There are catch basins connecting with an 18-inch drainline near the corner of Kilohana Drive and South Kihei Road, approximately 500 feet south of the site. The drainline extends approximately 200 feet further south to a channel which extends to the ocean.

#### 4. <u>Electrical System</u>

Electrical service to the sites is provided by Maui Electric Company.

# Chapter IV

Potential Impacts and Mitigation Measures

### IV. POTENTIAL IMPACTS AND MITIGATION MEASURES

### A. IMPACTS TO THE PHYSICAL ENVIRONMENT

#### 1. <u>Drainage and Erosion Control</u>

In reference to short-term construction-related impacts, a new wet well will be constructed at WWPS Nos. 7 and 8. The new wet well at WWPS No. 7 measures approximately 8-feet by 8-feet. At WWPS No. 8, the wet well would be approximately 10-feet by 12-feet. Both wet wells would be adjacent to the existing pump station structure and below-grade to connect with existing transmission lines.

Because of its elevation near sea level, the installation of the wet wells will involve dewatering during its period of construction. All discharges will be pumped to a County or other acceptable drainage system by the use of pipes or other acceptable means.

For WWPS No. 7, a 30-inch County drainline exists in the vicinity of Kaiau Place and South Kihei Road. This is approximately 1,200 feet north from the WWPS No. 7 site. In the case of WWPS No. 8, there is an 18-inch drainline near the corner of Kilohana Drive and South Kihei Road, approximately 500 feet south of the site.

It is anticipated that the construction period for the wet wells would be minimized to the greatest extent possible in order to mitigate any possible impacts. If necessary, the discharge shall be filtered or otherwise treated to comply with all applicable Federal, State and County regulations. For subsurface construction near sea level, dewatering procedures are necessary to implement the project. When completed, the improvements would increase reliability and efficiency of the pump stations.

In the long-term, a new approximately 30-foot by 30-foot structure housing the motor control center and generator would be built on the WWPS No. 6 site. New asphaltic concrete paving covering approximately 1,100 square feet would also be constructed. Other smaller above-ground new structures include a 2,000-gallon above-ground diesel storage tank, switch pad, transformer pad and new fencing.

For WWPS No. 7, the only above-ground improvements are the construction of a new 250-gallon above-ground diesel fuel storage tank and fencing.

On the WWPS No. 8 site, a new approximately 25-foot by 25-foot structure would house a generator room and electrical room, and new asphaltic concrete paving of approximately 1,000 square feet would be added. Other smaller above-ground improvements include a switch pad, transformer pad, an above-ground diesel fuel storage tank, and new fencing.

It is anticipated that on-site runoff from the subject sites will cause no adverse impacts to adjacent and downstream properties.

#### 2. Flora and Fauna

There are no known significant habitats or rare, endangered or threatened species of flora and fauna located on the project site. The proposed improvements are not considered a significant adverse impact upon these environmental features.

### 3. Air Quality and Noise

Air quality and noise parameters in the immediate vicinity of the

project sites are anticipated to be affected by short-term construction activities. However, since site work is not substantial, dust generated from construction activities is not expected to adversely affect surrounding properties. While new CMU structures are proposed to be constructed at WWPS Nos. 6 and 8, much of the project's construction, modifications and upgrades involve installation of equipment within the existing pump stations. However, the construction of new wet wells at WWPS Nos. 7 and 8 may involve some noise impacts from dewatering pump operations for wet well construction. Should a diesel fuel generator be utilized, housing which encloses the generator would be installed to mitigate noise impacts. An electrically run generator may also be used depending on the extent of required dewatering. Although the electric generator would result in more quiet operation, its capability is also limited relative to a diesel generator.

On a long-term basis, the projects will not generate adverse air quality or noise conditions.

Regarding odor, the access structure at WWPS No. 6 and hatches to the wet wells at WWPS Nos. 7 and 8, will be sealed as part of the wet well construction, thereby reducing odor impacts. Moreover, equipment upgrades are also anticipated to reduce turbulence within the wet wells which aid in keeping odors confined within the wells. The project can be anticipated to reduce any odor impacts on the surrounding community.

### 4. Scenic and Open Space Resources

WWPS No. 6 is located in the northeastern corner of Kalama Park abutting South Kihei Road. A new CMU structure approximately 18

feet in height is proposed to be built makai of the existing CMU pump station structure. The new structure is proposed to be of comparable materials, size and style to the existing structure. The proposed improvements should complement the existing built environment.

WWPS No. 7 is located makai of South Kihei Road in Kamaole Beach Park I. The installation of a new above-ground diesel fuel storage tank necessitates fencing to provide security for the site. Landscaping will be planted outside of the fencing to provide a buffer. The proposed fence would extend around the perimeter of the pump station improvements.

WWPS No. 8 is located mauka of South Kihei Road. A new CMU structure approximately 18 feet in height is also proposed on this site, which will be comparable to the existing pump station structure. New fencing and landscaping are proposed around the perimeter of the 9,995 square foot site.

Above-ground diesel fuel storage tanks within each pump station site are not anticipated to exceed 4 feet in height.

The proposed improvements will not have a significant impact on coastal scenic and open space resources.

#### 5. Archaeological Resources

The sites have been in urban use for a number of years and surface character has been altered during original construction of the wastewater pump stations and laying of transmission lines. Accordingly, the improvements to WWPS Nos. 6, 7 and 8 are not

anticipated to have adverse impacts to archaeological resources.

#### B. <u>IMPACTS TO COMMUNITY SETTING</u>

#### 1. Population and Local Economy

The proposed improvements will improve reliability and increase the capacity of the stations to permit the handling of wastewater flows.

The proposed improvements will help to preserve the long-term economic vitality of the region by ensuring the integrity of the wastewater reclamation system. Additionally, improved facilities for wastewater reclamation will promote the public health and welfare of the residents of the Kihei District.

#### 2. Public Services

The proposed improvements will not require any additional persons to handle operations and maintenance. Thus, the employment-related impacts of the project upon public service needs, such as police and fire protection, medical facilities, recreational facilities and schools are considered negligible.

#### 3. Impacts to Wastewater Reclamation System

The proposed improvements represent an incremental improvement to the Kihei Wastewater Reclamation System. The improvements to WWPS Nos. 6, 7 and 8 replace aging and outdated equipment which increases the reliability of the system.

The proposed improvements also would provide additional pumping capacity which is necessary to serve ongoing development. The proposed diesel tanks would provide fuel for back-up electricity generation in the event that electricity is not available.

### 4. Impacts to Other Infrastructure Systems

The proposed improvements will not have any significant impact on roadway, water or solid waste disposal systems. With no additional employees anticipated as a result of the proposed improvements, and maintenance expected to decrease with the new equipment in place, the proposed project's impacts upon other infrastructure systems is expected to be negligible.

# Chapter V

Relationship to Land Use Plans, Policies and Controls

### V. RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS

#### A. STATE LAND USE DISTRICTS

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes the four major land use districts in which all lands in the State are placed. These districts are designated "Urban", "Rural", "Agricultural", and "Conservation". WWPS Nos. 6, 7 and 8 are within the "Urban" district. See Figure 11.

#### B. GENERAL PLAN OF THE COUNTY OF MAUI

The General Plan of the County of Maui (1990 Update) provides long-term goals, objectives and policies directed toward the betterment of living conditions in the County. Addressed are social, environmental, and economic issues which influence both the quantity and quality of growth in Maui County.

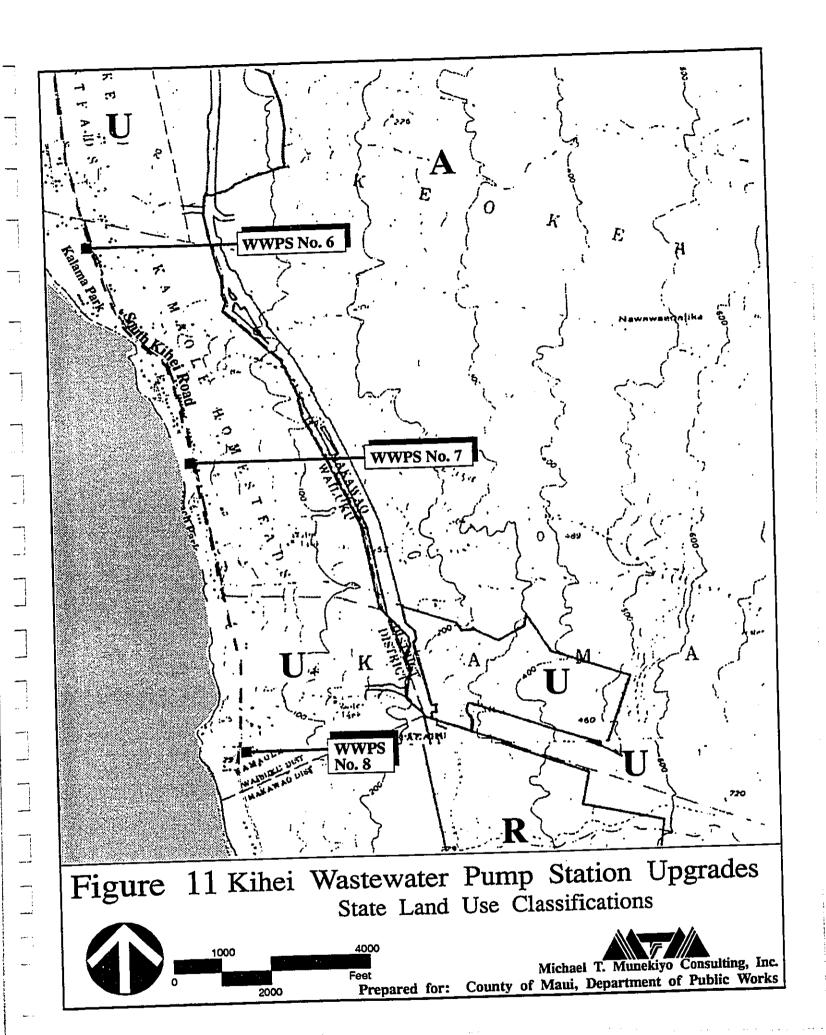
Implementation of the General Plan would be facilitated by the proposed improvements to WWPS Nos. 6, 7 and 8. The following General Plan objective is addressed by this project:

#### Objective:

To provide efficient, safe and environmentally sound systems for the disposal and reuse of liquid and solid wastes.

#### C. KIHEI-MAKENA COMMUNITY PLAN

Nine (9) community plan regions have been established in Maui County. Each region's growth and development is guided by a Community Plan, which contains objectives and policies drafted in accordance with the County General Plan. The purpose of the Community Plan is to outline a relatively detailed agenda for carrying out these objectives.



The proposed project falls within the jurisdiction of the Kihei-Makena Community Plan. The proposed project would facilitate implementation of the Kihei-Makena Community Plan by addressing the objective to "coordinate improvements to existing sewage transmission lines and the central treatment plant to meet the needs of future population growth."

The Kihei-Makena Community Plan sets forth the detailed land use in the Kihei-Makena Community Planning Region which include the three WWPS sites. WWPS No. 6 is located on lands designated Park (PK). Surrounding land uses include Single-Family in the north, Business district to the east, and Multi-Family to the southeast. See Figure 12.

WWPS No. 7 is also located on lands designated as Park (Pk). Surrounding land uses include Multi-Family to the north, Hotel to the east and south, and Business to the southeast. See Figure 12.

As with WWPS Nos. 6 and 7, WWPS No. 8 is located on lands designated as Park (Pk) and is surrounded by lands designated as Single-Family and Multi-Family. See Figure 12.

#### D. COUNTY OF MAUI SPECIAL MANAGEMENT AREA

The subject property is located within the County of Maui's Special Management Area. Pursuant to Chapter 205A, Hawaii Revised Statutes, and the Rules and Regulations of the Planning Commission of the County of Maui, projects located within the SMA are evaluated with respect to SMA objectives, policies and guidelines. This section addresses the project's relationship to applicable coastal zone management considerations, as set forth in Chapter 205A and the Rules and Regulations of the Maui Planning Commission.

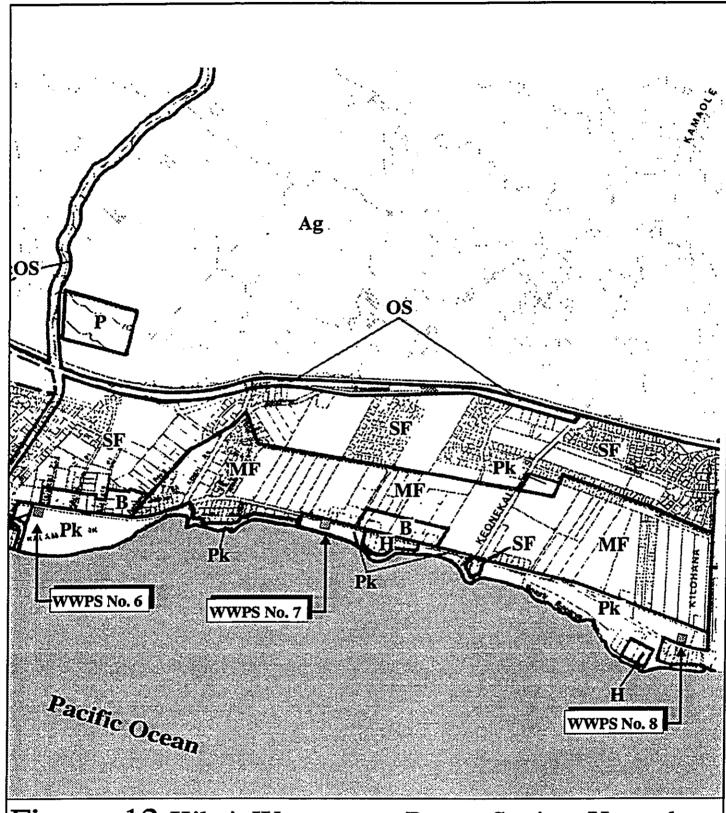


Figure 12 Kihei Wastewater Pump Station Upgrades
Community Plan Land Use Designations



NOT TO SCALE

Michael T. Munekiyo Consulting, Inc.
Prepared for: County of Maui, Department of Publics

#### 1. Recreational Resources

<u>Objective:</u> Provide coastal recreational resources accessible to the public.

#### Policies:

- a. Improve coordination and funding of coastal recreation planning and management; and
- b. Provide adequate, accessible and diverse recreational opportunities in the coastal zone management area by:
  - Protecting coastal resources uniquely suited for recreation activities that cannot be provided in other areas;
  - (2) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites and sandy beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
  - (3) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
  - (4) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
  - (5) Encouraging expanded public recreational use of County, State and federally owned or controlled shoreline lands and waters having recreational value;
  - (6) Adopting water quality standards and regulating point and non-point sources of pollution to protect and where feasible, restore the recreational value of coastal waters; and
  - (7) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of

discretionary approvals or permits, and crediting such dedication against the requirements of Section 46-6 of the Hawaii Revised Statutes.

**Response:** The proposed project is not anticipated to significantly affect existing coastal or inland recreational resources. Regarding WWPS Nos. 6 and 7, access to the shoreline through Kalama Park and Kamaole Beach Park I will continue as it currently exists. WWPS No. 8 is located mauka of South Kihei Road and does not affect public access to the shoreline.

#### 2. <u>Historical/Cultural Resources</u>

<u>Objective:</u> Protect, preserve and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

#### Policies:

- 1. Identify and analyze significant archaeological resources;
- 2. Maximize information retention through preservation of remains and artifacts or salvage operations; and
- 3. Support State goals for protection, restoration, interpretation and display of historic resources.

**Response:** The sites of WWPS Nos. 6, 7 and 8 are not anticipated to contain any significant archaeological resources. The sites are located in an urban area and have already been significantly altered during the construction of the original pump stations and transmission lines.

#### 3. Scenic and Open Space Resources

Objective: Protect, preserve and where desirable, restore or

improve the quality of coastal scenic and open space resources.

#### Policies:

- 1. Identify valued scenic resources in the coastal zone management area;
- Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural land forms and existing public views to and along the shoreline;
- 3. Preserve, maintain and, where desirable, improve and restore shoreline open space and scenic resources; and
- Encourage those developments which are not coastal dependent to locate in inland areas.

**Response:** The project should have an insignificant impact on coastal scenic and open space resources. Landscaping will be maintained, restored or added to buffer fencing at all three sites.

#### 4. Coastal Ecosystems

Objective: Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems.

#### Policies:

- Improve the technical basis for natural resource management;
- Preserve valuable coastal ecosystems of significant biological or economic importance;
- 3. Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- 4. Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate State water quality standards.

Response: Improvements to pump station sites are not expected

to adversely impact coastal ecosystems. The project does not involve extensive grading. Applicable erosion control measures will be implemented during and after construction. Dewatering discharges during construction will be pumped to the closest County or other drainage system and will be filtered or otherwise treated, if necessary, to comply with all applicable Federal, State and County regulations.

#### 5. Economic Uses

**Objective:** Provide public or private facilities and improvements important to the State's economy in suitable locations.

#### Policies:

- Concentrate in appropriate areas the location of coastal dependent development necessary to the State's economy;
- Ensure that coastal dependent development such as harbors and ports, visitor facilities, and energy-generating facilities are located, designed and constructed to minimize adverse social, visual and environmental impacts in the coastal zone management area; and
- 3. Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
  - a. Utilization of presently designated locations is not feasible;
  - Adverse environmental effects are minimized; and
  - c. Important to the State's economy.

**Response:** The proposed project enhances the viability and allows for the increase in capacity of the Kihei Wastewater Reclamation System. An adequate wastewater reclamation system is an

important component in aiding the implementation of land use policy to encourage uses important to the State's economy.

#### 6. Coastal Hazards

Objective: Reduce hazard to life and property from tsunami, storm waves stream flooding, erosion and subsidence.

#### Policies:

- Develop and communicate adequate information on storm wave, tsunami, flood, erosion and subsidence hazard;
- 2. Control development in areas subject to storm wave, tsunami, flood, erosion and subsidence hazard;
- 3. Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- 4. Prevent coastal flooding from inland projects.

**Response:** The proposed improvements will not result in significantly increased runoff from the subject properties. During construction, trenches will be kept free from water during the installation, testing, and backfilling of pipes. Dewatering discharges will be directed to County drainage systems or other acceptable systems.

#### 7. Managing Development

**Objective:** Improve the development of review process, communication, and public participation in the management of coastal resources and hazard.

#### Policies:

- 1. Effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development;
- 2. Facilitate timely processing of application for development

requirements; and

Communicate the potential and short and long-term impacts
of proposed significant coastal developments early in their lifecycle and in terms understandable to the general public to
facilitate public participation in the planning and review
process.

Response: In compliance with the Special Management Area Rules and Regulations of the County of Maui, required documentation will be filed with the County Planning Department and will undergo public hearing and decision by the Maui Planning Commission. In addition, early consultation is provided through the process of preparing the Environmental Assessment. A Draft and Final Environmental Assessment have been prepared for public review in compliance with Chapter 343, Hawaii Revised Statutes, and Chapter 200 of Title 11, Administrative Rules, Environmental Impact Statement Rules.

Applicable State and County requirements will be adhered to in the design and construction of the proposed project.

# Chapter VI

Findings and Conclusion

#### VI. FINDINGS AND CONCLUSION

The proposed improvements to Kihei WWPS Nos. 6, 7 and 8 would increase reliability by replacing aging and outdated equipment. Additional pumping capacity is also being provided, which is necessary to serve ongoing development.

The proposed project will not involve substantial site work. However, there are temporary nuisances normally associated with construction activities. Dewatering discharges from wet well construction at WWPS Nos. 7 and 8 will be routed to the closest County or other acceptable drainage system in compliance with all applicable Federal, State and County regulations. Noise impacts related to dewatering pump operations are expected to be mitigated. The extent of construction impacts should not be adverse.

From a long-term perspective, the project is not anticipated to cause adverse environmental impacts. There are no known archaeological features or rare/threatened species of flora and fauna at the three pump station sites. The project also will not generate adverse air quality or noise conditions. Each of the pump station sites does not have a significant impact on coastal scenic and open space resources.

No additional County personnel are required as a result of the proposed improvements. In this regard, the project is not considered significant in terms of its impacts to public services and other infrastructure systems.

In light of the foregoing findings, it is concluded that the proposed action will not result in any significant impacts.

# Chapter VII

Agencies Contacted in the Preparation of the Draft Environmental Assessment and Responses Received

## VII. AGENCIES CONTACTED IN THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT AND RESPONSES RECEIVED

The following agencies were contacted during the preparation of the Environmental

#### Assessment:

- U.S. Army Corps of Engineers Pacific Ocean Division Building 230 Fort Shafter, Hawaii 96858
- Mr. Lionel Camara, Chair State Fire Council 1455 South Beretania, #305 Honolulu, Hawaii 96814
- 3. Mr. Tom Arisumi, Division Chief
  Department of Health
  Environmental Management
  Division
  Five Waterfront Plaza, Suite 250
  500 Ala Moana Boulevard
  Honolulu, Hawaii 96813
- 4. Mr. David Nakagawa
  Chief Sanitarian
  Department of Health
  54 High Street
  Wailuku, Hawaii 96793
- 5. Ms. Rae Loui, Deputy Director
  Dept. of Land & Natural
  Resources
  Division of Water Resource
  Management
  Regulations Branch
  P. O. Box 621
  Honolulu, Hawaii 96809
  - Mr. Brian Miskae, Director Planning Department 250 South High Street Wailuku, Hawaii 96793
  - 7. Ms. Charmaine Tavares, Director Dept. of Parks & Recreation 200 South High Street Wailuku, Hawaii 96793

- 8. Mr. Ron Davis, Chief
  Department of Fire Control
  County of Maui
  200 Dairy Road
  Kahului, Hawaii 96732
- Mr. Gene Thompson
   Kihei Community Association
   P. O. Box 662
   Kihei, Hawaii 96753
- Ms. Tanya Every
   Wailea Community Association
   3750 Wailea Ala Nui, Suite F21
   Wailea, Hawaii 96753

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William Chiangia 92 OUT -6 P.2 ORECLAMATION DIVISION COUNTY OF MAUL

Mr. George N. Kaya Director of Public Works Bounty of staui 200 South High Street Wailuku, Maui, Hawaii

8555555

Dear Mr. Kaya:

Thank you for the opportunity to review and comment on the Project Summary for the proposed modifications to upgrade Kihei Wastewater Pump Station 6, 7, and 8 Kihei, Hawaii. The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

- It appears there will be no work in waters of the United States; therefore a DA permit will not be required for this project.
- b. According to the enclosed Federal Emergency Management Agency's Flood Insurance Rate Maps, Panels 150003-0205-C dated September 6, 1989, and 150003-0330-B, dated June 1 1981, Wastewater Pump Station 6 is located in Zone AH (areas inundated by the 100-year flood with a base flood elevation of 7.0 feet above mean sea level); Pump Stations 7 and 8 are located in Zone C (areas of minimal flooding).

Sincerely,

Kisuk Cheung, Director of Englisherin

Waste Water Pechananan Division £ EVSSIE HIRECY **ALEX** PEDRO MIKE IN: OPERATIONS ALMA YVONNE CHERRIE DATE 10 7

Enclosure

DEPT OF PUBLIC # # # # # # # # # # # # # # # # # # #	WILLIAM W. PATY CHAIRITEMIN  JOHN C. LEWIN. M.D. MICHAEL J. CHUN. PN.D. ROBERT S. NAKATA HICHARD N. COX. P.E. GUY K. FUJIMUMA  RAE M. LOUI. P.E. DHUTT
Mr. George Kaya  Director of Public Works  Department of Public Works  County of Maui  200 South High Street  Wailuku, Hawaii 96795  Dear Mr. Kaya:  Proposed Modifications to Kihei Wastewater Pump Station Nos. 6, 7, & 8  Thank you for providing our offers of	RECEIVED
Thank you for providing our office the opportunity to comment on your proposed.  Kihei Wastewater Pump Station modification project.  We have reviewed your project summary and related drawings and find that yo project would not impact any ongoing programs and projects of the State Commission Water Resources Management. Accordingly, we have no particular comments to offer at time.	
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	George N. Kaya Director of Public Works County of Maul 200 South High Street Walluku, Hawall 96793	ED
	RE: MODIFICATION TO KIHEI WASTEWATER PUMP STATION NOS. 6,7, & 8	
	Dear Mr. Kaya:	
	The Department of Fire Control is in receipt of your September 14, 1992 for comments on the modifications to the Kihel Wastewater Pump Stations num	request bers 6,
	7, and 8.	
	If existing tanks are to be removed, removal Contractor shall have one following licenses: "A" General Engineering, C-37 or C-37F Plumbing Contractor	or or C-
	68 Service Station Installer.  We have no objections to this project. The only thing I suggest is to the shoveground fuel tank installations	hat the
	Contractor awarded the Contract to do the above Fire Prevention Bureau. Instrument and applications for the tank permits to the Fire Prevention Bureau.	allation tion will
	plans and applications for the tank permits to the Fire Frevential Barbara School Contractor shall have one of the same licenses mentioned above. Fire Prevention work with them to get a quality Installation. Contact person in Fire Preventable above ground tanks is Inspector Tommy Meyer, telephone 243-7566.	tion for
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# Chapter VIII

Letters Received after Filing of Draft Environmental Assessment and Proposing Agency Response

### VIII. LETTERS RECEIVED AFTER FILING OF DRAFT ENVIRONMENTAL ASSESSMENT AND PROPOSING AGENCY RESPONSE

:NT-3Y:COM WASTE MGT DIV :11- 9-92 : 6:12AM ; 808 244 9026;# 1 8082437425-DEFY OF INDA CHOCKETY ENGLE Mayory OFFICS BILL MEDERIOS Long Range Division I MAN W. BURKETON / KI LE LE LE LE LE LE  $(\bar{1})$ Directer DIR COLLEEN M. SUYAMA HUMMAT K. KERNING LIFE OPUND DISTRATE CC **Current Planning Division** KALVIN KOBAYASHI LUCA Energy Olvision WW RECL. COUNTY OF MAU) BOLID W. ANNING DEPARTMENTS MOV -5 P1:05 ENGA. 240 S. HIGH STREET WAILUKU, MAUI, HAWAII 90703 SECTY. RECL COUNTY OF TAMINGH DIANG! Return to: Data 11/05 November 2, 1992 33 Mr. George Kaya, Director Department of Public Works IN'SH 200 S. High Street W Wailuku, Hawaii 96793 Dear Mr. Kaya: Proposed Modifications to Kihei Wastewater Pump Station Nos. 6, 7 and 8. We have reviewed the proposed modifications to the above referenced pump stations and have the following comments: All three pump stations are located within the Special Management Area of the County of Maui and is subject to the developmental review process of the Special Management Area Rules and Regulations. An appropriate SMA Permit will be required prior to the initiation of construction. Please note that cumulatively should the improvements involve more than \$125,000 of improvements then a Special Management Area Use Permit requiring a public hearing will be necessary. It is my understanding that significant modifications to Pump Stations 6 and 8 involving new structures will be required. Pump Station No. 7 is located within Kamaole Beach Park No. 2 and appears to be within the Shoreline Setback Area. As such a shoreline setback variance may be required for the proposed modifications. However, without a certified shoreline survey map my department cannot determine the setback line for this property and the proposed whether a permit is required for the proposed modifications. Further, please note that except for landscape public access walkways no structural improvements (i.e. building, fencing, etc.) are permitted within the minimum set setback area. ENSHIE HRACY 17024 ALEX PLEIRO

Letter - George Kaya RE: Kihei Pump Stations 6,7,8 November 2, 1992 Page 2

Also, we note that the existing pump station due to shoreline erosion that has occurred at Kamaole Beach Park No. 2 may in the future be undermined due to storm wave action. During your review of the Kihei Sewerage System, careful consideration should be given to installing minimal improvements at this pump station and possible future relocation of this pump station outside of Kamaole Beach Park.

- 3. Relative to Pump Station No. 8 we note that a drainage ditch is located on-site. As such any improvements that may affect the drainageway could have a significant impact. In conjunction with your request for a Special Management Area Permit the impacts on the drainageway should be addressed and appropriate mitigation measures incorporated. Further, the Department of Army should be consulted relative to their permit requirements.
- 4. Also, the potential impacts from the above ground fuel tanks and excavation work for the underground utility lines, wells, etc. should be addressed. Especially, the impacts from oil leaks/spills and disposal of underground water encountered during excavation work.
- 5. Relative to Pump Station No. 6 we concur that the existing site is approximately 850 feet from the defined shoreline (existing rock revetment) and that the shoreline has been artificially fixed by the revetment. As such a certified shoreline survey map will not be required for this portion of the project.

Thank you for the opportunity to comment. If additional clarification is required please contact Ms. Colleen Suyama of my office.

Very truly yours,

BETAN MISKAE Planning Director

cc: C. Suyama

L...IDA CROCKETT LINGLE Mayor GEORGE N. KAYA CHAPLES JENCKS Deputy Director -AARON SHINMOTO, P.E. Chief Staff Engineer



#### COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS

200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAII 96793

December 7, 1992

RALPH NAGAMINE, L.S., P.E. Land Use and Codes Administration EASSIE MILLER, P.E. Wastewater Reclamation Division LLOYD P.C.W. LEE, P.E. Engineering Division DAVID WISSMAR, P.E. Solid Waste Division BRIAN HASHIRO, P.E. Highways Division

	Department 250 South 1	Miskae, Director of Planning High Street awaii 96793
	Dear Mr. M	fiskae:
	SUBJECT:	PROPOSED MODIFICATIONS TO KIHEI WASTEWATER PUMP STATION NOS. 6, 7 AND 8
	Than responses to	k you for your November 2, 1992 letter pertaining to the subject project. Our your letter are as follows:
	1.	We acknowledge that all three pump stations are located within the Special Management Area (SMA) and are preparing an SMA Use Permit application for review by your department and the Maui Planning Commission.
	2.	Regarding Pump Station No. 7, we have submitted a shoreline survey map to the Department of Land and Natural Resources for their review. The certification is anticipated shortly. Once the shoreline is certified, we anticipate working closely with your department to determine compliance with shoreline setback rules.
		We are aware that shoreline erosion has occurred at Kamaole Beach Park in the vicinity of Pump Station No. 7. It should be noted that proposed improvements at Pump Station No. 7 are relatively minimal in relation to Pump Station Nos. 6 and 8. The only above ground improvements are a new diesel fuel storage tank and fencing around a portion of the perimeter of the site.
•		We have checked whether an existing drainageway is located within the site of Pump Station No. 8. Based on a site inspection, it has been determined that the natural drainageway is located southeast of the Pump Station No. 8 site and does not traverse the property. Thus, our plot plan for Pump Station No. 8 site and does

not traverse the property. Thus, our plot plan for Pump Station No. 8 will be

Mr. Brian Miskae, Director Page Two usbreised -December 7, 1992 revised to reflect this information. The Corps of Engineers was consulted during the preparation of the Draft Environmental Assessment. They noted that it appears that no work is proposed in waters of the United States and that the area of Pump Station No. 8 is located in Zone C (areas of minimal flooding). 4. Above ground fuel tanks provide for early detection of possible leaks as compared to underground tanks. The pump station sites are proposed to be fenced and landscaped in order to provide site security. An expansion of below grade wet wells are proposed at Pump Station Nos. 7 and 8. For subsurface construction near sea level, procedures for disposal of underground water are necessary to implement the project. All discharges will be pumped to a County or other acceptable drainage system by the use of pipes and other acceptable means. If necessary, the discharge will be filtered or otherwise treated to comply with all applicable Federal, State and County regulations. Pump Station No. 6 is approximately 850 feet away from the shoreline and the 5. shoreline has been artificially fixed by an existing rock revetment. Accordingly, we acknowledge that a certified shoreline survey is not necessary for Pump Station No. 6. We appreciate your input and look forward to working with you and your staff in the permit process. Very truly yours, Deng Okay GEORGE N. KAYA Director of Public Works Westley Chun, Brown & Caldwell Consultants cc: Milton Arakawa, Michael T. Munekiyo Consulting, Inc. RR:gmd (CT93053)

# References

#### **REFERENCES**

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